# Federal Operating Permit Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name: Valley Proteins, Inc.

Facility Name: Valley Proteins-Emporia Facility Location: 25170 Val-Pro Drive

Emporia, Virginia

Registration Number: 60963

Permit Number: TRO-60963

June 28, 2005 Effective Date

June 27, 2010 Expiration Date

(for)

Robert G. Burnley

Director, Department of Environmental Quality

June 20, 2005

Signature Date

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## I. Facility Information

#### Permittee

Valley Proteins, Inc. P.O. Box 3588 Winchester, Virginia 22604

#### **Responsible Official**

Thomas A. Gibson, Jr. Director of Environmental Affairs

#### **Facility**

Valley Proteins-Emporia 25170 Val-Pro Drive Emporia, Virginia 23847

#### **Contact Person**

Micheal Anderson General Manager (434) 634-9475

**County-Plant Identification Number:** 51-175-00048

**Facility Description:** NAICS 311613 & 311119. Animal parts, animal by-products, and restaurant grease are cooked in one large continuous cooker and two small batch tallow rendering cookers, using steam from two boilers, to produce meal solids and finished animal vegetable oil product. Liquid products are stored in storage tanks, and the meal products are stored in silos until products are hauled away by truck or railcar. The exhaust air from all cooker systems is routed to a venturi scrubber and then most of the time ( $\approx$ 85%) into one of the boilers. At times ( $\approx$ 15%) when both boilers are operating at low fire, the exhaust air flow from the venturi scrubber is routed to the cross flow two stage packed scrubber.

## **II. Emission Units**

Equipment to be operated consists of:

Emission	Stack ID	Emission Unit Description	Size/Rated	Pollution Control Device (PCD)	PCD ID	Pollutant	Applicable Permit
Unit ID			Capacity*	Description		Controlled	Date
Fuel Burning	g Equipmen	t					
B-1	B1E-1	Cleaver Brooks, CB-700, 1980	29.3 MM	N/A	N/A	N/A	04/29/05
			Btu/hr				
B-2	B2E-2	Cleaver Brooks, CB-700, 1980	29.3 MM	N/A	N/A	N/A	04/29/05
			Btu/hr				
Process A (	Continuous	Cooker					
	B1E-1 or	Dupps 320U continuous cooker,	25 tons/hr	A.C. Corp venturi scrubber, 1980.	VS-1	PM/PM-10	04/29/05
	B2E-2	2003, with Kennedy Tank &		(B-1 or B-2 A.C. Corp Firebox,	(B-1,2)	(Odor)	(04/29/05, State
	(85%)	MFG. Co. condenser (2005).		1980)			Only)
CC-1	or						
	CFS1E-1	Dupps 320U continuous cooker,	25 tons/hr	A.C. Corp venturi scrubber, 1980.	VS-1	PM/PM-10	04/29/05
	(15%)	2003, with Kennedy Tank &		(A.C. Corp RDS-100 Cross Flow	(CFS-1)	(Odor)	(04/29/05, State
		MFG. Co. condenser (2005).		Scrubber, 1980)			Only)
Process B I	Batch Cooke		1 "		T		0.4/20/07
	B1E-1 or	Two Dupps tallow batch cookers,	1.75 tons/hr	A.C. Corp venturi scrubber, 1980.	VS-1	PM/PM-10	04/29/05
DC 1 %	B2E-2	1980, with Kennedy Tank &	each	(B-1 or B-2 A.C. Corp Firebox,	(B-1,2)	(Odor)	(04/29/05, State
RC-1 & RC-2	(85%)	MFG. Co. condenser (2005).		1980)			Only)
RC-2	or CFS1E-1	Two Dunns tellow batch applying	1.75 tons/hr	A.C. Com venturi corubber 1000	VC 1	PM/PM-10	04/29/05
	(15%)	Two Dupps tallow batch cookers, 1980, with Kennedy Tank &	each	A.C. Corp venturi scrubber, 1980. (A.C. Corp RDS-100 Cross Flow	VS-1 (CFS-1)	(Odor)	04/29/05 (04/29/05, State
	(13/0)	MFG. Co. condenser (2005).	Cacii	Scrubber, 1980)	(CFS-1)	(Odoi)	Only)
		wird. Co. Condenser (2003).		Scrubber, 1700)			Olly)
		dition 2 of 04/20/05 parmit)					

(9 VAC 5-80 110 and Condition 2 of 04/29/05 permit)

<sup>\*</sup>The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

## III. Fuel Burning Equipment Requirements – (B-1 & B-2)

#### A. Limitations

- 1. **Fuel -** The approved fuels for the two boilers (B-1 & B-2) are residual oil and finished animal vegetable oil product. A change in the fuels may require a permit to modify and operate.
  - (9 VAC 5-80-110 and Condition 8 of 04/29/2005 permit)
- 2. **Fuel Throughput -** The two boilers (combined) shall consume no more than 1,300,000 gallons of residual oil and 1,512,729 gallons of finished animal vegetable oil product per year, calculated monthly as the sum of each consecutive 12-month period. (9 VAC 5-80-110 and Condition 9 of 04/29/2005 permit)
- 3. **Fuel -** The residual oil and cooking oil shall meet the specifications below:
  - a. RESIDUAL OIL which meets the ASTM specifications for numbers 4, 5, or 6 fuel oil.
  - b. RESIDUAL OIL with maximum sulfur content per shipment: 2.4% by weight.
  - c. FINISHED ANIMAL VEGETABLE OIL PRODUCT which is an oil produced on site from the facility's rendering process.
  - (9 VAC 5-80-110 and Condition 10 of 04/29/2005 permit)
- 4. **Emission Limits -** Emissions from the operation of the each boiler shall not exceed the limits specified below:

Particulate Matter	5.2 lbs/hr
PM-10	4.5 lbs/hr
Sulfur Dioxide	72.8 lbs/hr
Nitrogen Oxides	10.6 lbs/hr
(as NO <sub>2</sub> )	

Carbon Monoxide 21.6 lbs/hr Volatile Organic 1.3 lbs/hr

Compounds

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers III.A.1-3, 6, and III.B.2. (9 VAC 5-80-110 and Condition 12 of 04/29/2005 permit)

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5. **Emission Limits** - Emissions from the operation of the two boilers (B-1 & B-2) (combined) shall not exceed the limits specified below:

Particulate Matter	17.4 tons/yr
PM-10	15.1 tons/yr
Sulfur Dioxide	244.9 tons/y
Nitrogen Oxides	35.8 tons/y
( )10 )	-

(as NO<sub>2</sub>)

Carbon Monoxide 78.9 tons/yr Volatile Organic 4.7 tons/yr

Compounds

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers III.A.1-3, 6, and III.B.2. (9 VAC 5-80-110 and Condition 13 of 04/29/2005 permit)

- 6. **Visible Emissions Limit Boilers -** For residual oil: visible emissions from each boiler stack shall not exceed twenty (20) percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed thirty (30) percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). For finished animal vegetable oil product: visible emissions from each boiler stack shall not exceed ten (10) percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed twenty (20) percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction. (9 VAC 5-80-110 and Condition 15 of 04/29/2005 permit)
- 7. **Maintenance/Operating Procedures -** The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:
  - a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
  - b. Maintain an inventory of spare parts.
  - c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.

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d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request. (9 VAC 5-80-110 and Condition 24 of 04/29/2005 permit)

## **B.** Monitoring

1. **Visible Emissions Observations -** The permittee shall check each boiler stack at least once each week (Monday-Sunday) during daylight hours of operations for visible emissions for at least six minutes. If visible emissions are noted from one stack or both stacks, maintenance shall be performed on the boiler (s) to eliminate the visible emissions. If visible emissions continue after maintenance actions, a visible emissions evaluation (VEE) shall be immediately conducted on each stack for at least six minutes in accordance with Method 9 (40 CFR 60, Appendix A). If the VEE opacity average for either stack exceeds ten (10) percent, the VEE shall continue for one hour from initiation on each stack.

(9 VAC 5-80-110 and Condition 18 of 04/29/2005 permit)

- 2. Fuel Oil Certification and Finished Animal Vegetable Oil Product Sample Analysis The permittee shall a certification from the fuel supplier with each shipment of residual oil delivery. Each fuel supplier certification shall include the following:
  - a. The name of the fuel supplier,
  - b. The date on which the oil was received,
  - c. The volume of oil delivered in the shipment,
  - d. A statement that the residual oil complies with the American Society for Testing and Materials specifications for numbers 4, 5, or 6 fuel oil,
  - e. The sulfur content (percent by weight) of the residual oil
  - f. The finished animal vegetable oil product fuel tank, from which oil is used for boiler fuel, shall be sampled at least once per month when finished animal vegetable oil product is used for boiler fuel. The sample analysis shall use EPA approved methods, to determine a Btu value and sulfur content.
  - (9 VAC 5-80-110 and Condition 11 of 04/29/2005 permit)

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## C. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:

- 1. Annual throughput of residual oil and finished animal vegetable oil product, calculated monthly as the sum of each consecutive 12-month period.
- 2. All fuel supplier certifications.
- 3. The weekly visible emissions observations and maintenance activities to reduce visible emissions.
- 4. The finished animal vegetable oil product sample analyses.
- 5. Emission factors for residual oil from the latest AP-42, Section 1.3, Fuel Oil Combustion and emission factors from stack test(s) of boilers firing finished animal vegetable oil product to verify compliance upon DEQ request with the emission limitations in Conditions III.A.4 & 5. (Annual emissions are calculated monthly as the sum of each consecutive 12-month period.)
- 6. Results from stack tests and visible emission evaluations.
- 7. Scheduled and unscheduled maintenance.
- 8. Records of the required training including a statement of time, place and nature training provided.
- 9. Written operating procedures and a maintenance schedule for the boilers. All records required by this condition shall be maintained on site for a period of five years and shall be made available for inspection by the DEQ. (9 VAC 5-80-110 and Conditions 19 and 24 of 04/29/2005 permit)

## D. Testing

1. **Testing/Monitoring Ports** - The permitted facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. This includes constructing the facility such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and providing stack or duct that is free from cyclonic flow. Test ports shall be provided when requested at the appropriate locations **or** in accordance with the applicable performance specification (reference 40 CFR Part 60, Appendix B).

(9 VAC 5-50-30 F and Condition 6 of 04/29/2005 permit)

2. **Stack Tests** - If testing to demonstrate compliance is conducted in addition to the monitoring specified in this permit, the permittee shall use the following methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method	
	(40 CFR Part 60, Appendix A)	
$NO_x$	EPA Method 7	
$\mathrm{SO}_2$	EPA Method 6	
СО	EPA Method 10	
VOC	EPA Method 25, 25a	
PM/PM-10	EPA Method 5, 201, and 202	
Visible Emission	EPA Method 9	

(9 VAC 5-80-110 and Condition 17 of 04/29/2005 permit)

## IV. Process Equipment Requirements – Cookers (CC-1, RC-1, & RC-2)

#### A. Limitations

1. **Emission Controls** – The particulate emissions from the continuous cooker (CC-1) and batch cookers (RC-1, and RC-2) shall be controlled by the venturi scrubber. The venturi scrubber shall be provided with adequate access for inspection and shall be in operation when any cooker is operating.

(9 VAC 5-80-110 and Condition 3 of 04/29/2005 permit)

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2. **Rendering Plant Throughput -** The throughput of rendering raw product to the continuous cooker (CC-1) shall not exceed 124,800 tons per year, calculated monthly as the sum of each consecutive 12-month period.

(9 VAC 5-80-110 and Condition 7 of 04/29/2005 permit)

3. **Emission Limits** - Emissions from the operations of all the cookers (combined) shall not exceed the limits specified below.

Particulate Matter 0.5 lbs/hr 1.4 tons/yr PM-10 0.5 lbs/hr 1.4 tons/yr Volatile Organic Compounds 2.2 lbs/hr 6.0 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition IV.A.1, 2, and 4.

(9 VAC 5-80-110 and Condition 14 of 04/29/2005 permit)

- 4. **Visible Emission Limit -** Visible emissions from the cross flow scrubber stack (CFS1E-1) shall not exceed twenty (20) percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed thirty (30) percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This applies at all times except during startup, shutdown, and malfunction. (9 VAC 5-80-110 and Condition 16 of 04/29/2005 permit)
- 5. Maintenance/Operating Procedures The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:
  - a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
  - b. Maintain an inventory of spare parts.
  - c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.

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d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request. (9 VAC 5-80-110 and Condition and 24 of 04/29/2005 permit)

## **B.** Monitoring

1. **Visible Emissions Observations -** The permittee shall check the cross flow scrubber stack (CFS1E-1) at least once each week (Monday-Sunday) during daylight hours of operations for visible emissions for at least six minutes. If visible emissions are noted from the stack, maintenance shall be performed on the cross flow scrubber to eliminate the visible emissions. If visible emissions continue after maintenance actions, a visible emissions evaluation (VEE) shall be immediately conducted on the stack for at least six minutes in accordance with Method 9 (40 CFR 60, Appendix A). If the VEE opacity average exceeds ten (10) percent, the VEE shall continue for one hour from initiation on the stack.

(9 VAC 5-80-110 and Condition 18 of 04/29/2005 permit)

2. Monitoring Devices - The venturi scrubber shall be equipped with devices to continuously measure the water flow and differential pressure across the scrubber. Each monitoring device shall be installed, maintained, and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the venturi scrubber is operating.

(9 VAC 5-80-110 and Condition 4 of 04/29/2005 permit)

3. **Monitoring Device Observations** - The venturi scrubber monitoring devices shall be observed by the permittee with a frequency of not less than once per operating day to ensure good performance of the venturi scrubber. The permittee shall keep a log of the monitoring device observations.

(9 VAC 5-80-110 and Condition 5 of 04/29/2005 permit)

## C. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:

- 1. Annual throughput of rendering product to the cookers (CC-1, RC-1, and RC-2), calculated monthly as the sum of each consecutive 12-month period.
- 2. The weekly visible emissions observations, maintenance activities to reduce visible emissions, and VEEs.
- 3. Scheduled and unscheduled maintenance.
- 4. Records of the required training including a statement of time, place and nature training provided.
- 5. Written operating procedures and a maintenance schedule for the cookers, condensers, and verturi scrubber.
- 6. Notifications of air pollution control equipment shut down or bypass, or both, for necessary scheduled maintenance, which results in excess emissions for more than one hour.
- 7. Monitoring device observations for the venturi scrubber. All records required by this condition shall be maintained on site for a period of five years and shall be made available for inspection by the DEQ. (9 VAC 5-80-110 and Conditions 19 and 24 of 04/29/2005 permit)

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## D. Testing

1. **Testing/Monitoring Ports** - The permitted facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. This includes constructing the facility such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and providing stack or duct that is free from cyclonic flow. Test ports shall be provided when requested at the appropriate locations **or** in accordance with the applicable performance specification (reference 40 CFR Part 60, Appendix B). (9 VAC 5-80-110 and Condition 6 of 04/29/2005 permit)

2. If testing to demonstrate compliance is conducted to in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method
	(40 CFR Part 60, Appendix A)
VOC	EPA Methods 18, 25, 25a
PM/PM-10	EPA Method 5, 201 and 202
Visible Emission	EPA Method 9

(9 VAC 5-80-110 and Condition 17 of 04/29/2005 permit)

#### E. Reporting

The permittee shall furnish notification to the TRO of the intention to shut down or bypass, or both, air pollution control equipment for necessary scheduled maintenance, which results in excess emissions for more than one hour, at least 24 hours prior to the shutdown. The notification shall include, but is not limited to, the following information:

- a. Identification of the air pollution control equipment to be taken out of service, as well as its location, and registration number;
- b. The expected length of time that the air pollution control equipment will be out of service;
- c. The nature and quantity of emissions of air pollutants likely to occur during the shutdown period;
- d. Measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage.

(9 VAC 5-80-110 and Condition 21 of 04/29/2005 permit)

## V. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emissi on Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80- 720 C)
MS-1, MS-2	Meal storage silo	9 VAC 5-80-720B	PM	N/A
T-1	No. 6 oil tank 30,000 gal (1982)	9 VAC 5-80-720B	VOC	N/A
T-2	No. 6 oil tank 20,000 gal (1980)	9 VAC 5-80-720B	VOC	N/A

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

## VI. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
40 CFR 63, Subpart	Boiler MACT	Not a HAPS Major Source
DDDDD		

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.

(9 VAC 5-80-140)

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#### VII. General Conditions

#### A. Violation of Ambient Air Quality Standard

The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.

(9 VAC 5-20-180 C and Condition 23 of 04/29/2005 permit)

#### **B.** Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

(9 VAC 5-80-110 N)

## C. Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete renewal application to the Department consistent with 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

- 1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
- 2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
- 3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
- 4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal, but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied, and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.

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5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant to section 9 VAC 5-80-80 D, the applicant fails to submit, by the deadline specified in writing by the Board, any additional information identified as being needed to process the application.

(9 VAC 5-80-80 B, C and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

#### D. Recordkeeping and Reporting

- 1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
  - a. The date, place as defined in the permit, and time of sampling or measurements.
  - b. The date(s) analyses were performed.
  - c. The company or entity that performed the analyses.
  - d. The analytical techniques or methods used.
  - e. The results of such analyses.
  - f. The operating conditions existing at the time of sampling or measurement.

(9 VAC 5-80-110 F)

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- Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
   (9 VAC 5-80-110 F)
- 3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than <u>July 1</u> and <u>January 1</u> of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
  - a. The time periods to be addressed are November 1 to April 30 and May 1 to October 31. The first report must also include the time period during 2005 for monitoring conducted under the previous permit.
  - b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:
    - (1) Exceedance of emissions limitations or operational restrictions;

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(2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,

- (3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
- c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9 VAC 5-80-110 F)

## **E.** Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than **January 1** each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a) (3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

- 1. The time period included in the certification. The time period to be addressed is November 1 to October 31.
- 2. The identification of each term or condition of the permit that is the basis of the certification.
- 3. The compliance status.
- 4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
- 5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.

6. Such other facts as the permit may require to determine the compliance status of the source.

7. One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00) U. S. Environmental Protection Agency, Region III 1650 Arch Street Philadelphia, PA 19103-2029

(9 VAC 5-80-110 K.5)

#### F. Permit Deviation Reporting

The permittee shall notify the Director, Tidewater Regional Office, within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition VII.D.3 of this permit. (9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

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#### G. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, Tidewater Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Tidewater Regional Office.

(9 VAC 5-80-250, 9 VAC 5-20-180 C, and Condition 22 of 04/29/2005 permit)

#### H. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

(9 VAC 5-80-110 G.1)

#### I. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.

(9 VAC 5-80-110 G.2)

#### J. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-110 G.3)

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#### K. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1790, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios. (9 VAC 5-80-190, 9 VAC 5-80-260, and Condition 1 of 04/29/2005 permit)

#### L. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. (9 VAC 5-80-110 G.5)

#### M. Duty to Submit Information

- 1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality. (9 VAC 5-80-110 G.6, 9 VAC 5-170-60, 9 VAC 5-20-160, and Condition 27 of 04/29/2005 permit)
- 2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.

  (9 VAC 5-80-110 K.1)

## N. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-305 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-355. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by **April 15** of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department. (9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

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#### O. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

- 1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
- 2. Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
- 3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;
- 4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
- 5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-90 and 9 VAC 5-50-90)

#### P. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. (9 VAC 5-50-20)

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## Q. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1. (9 VAC 5-80-110 J)

#### R. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

- 1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
- 2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
- 3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
- 4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2, 9 VAC 5-170-130, and Condition 20 of 04/29/2005 permit)

#### S. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

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1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

- 2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- 3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

## T. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-150 E, and Condition 28 of 04/29/2005 permit)

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#### **U.** Transfer of Permits

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another. (9 VAC 5-80-160)

- 2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.

  (9 VAC 5-80-160 and Condition 26 of 04/29/2005 permit))
- 3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200. (9 VAC 5-80-160)

#### V. Malfunction as an Affirmative Defense

- 1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the conditions of paragraph 2 are met.
- 2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
  - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
  - b. The permitted facility was at the time being properly operated.
  - c. During the period of malfunction, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit.

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d. The permittee notified the board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F 2 b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.

- 3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any requirement applicable to the source.
- 4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

#### W. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe, any permit for any of the grounds for revocation or termination or for any other violations of these regulations.

(9 VAC 5-80-260 and Condition 25 of 04/29/2005 permit)

#### X. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9 VAC 5-80-80 E)

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#### Y. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.

(40 CFR Part 82, Subparts A-F)

#### **Z.** Asbestos Requirements

The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).

(9 VAC 5-60-70 and 9 VAC 5-80-110 A.1)

#### AA. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.

(40 CFR Part 68)

#### **BB.** Changes to Permits for Emissions Trading

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

(9 VAC 5-80-110 I)

#### **CC.** Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

- 1. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
- 2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
- 3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)

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## **VIII. State-Only Enforceable Requirements**

The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-290 concerning review of proposed permits by EPA and draft permits by affected states.

#### A. Limitations

1. **(S.O.E.) Emission Controls** - The odor emissions from the plant shall be controlled by all material received at the rendering plant being processed or hauled away before it has decomposed to the extent that its storage or processing causes objectionable odors.

(9 VAC 5-50-140, 9 VAC 5-80-1180 D, and Condition 29 of 04/29/2005 permit)

2. **(S.O.E.)** Emission Controls - The odor emissions from the plant shall be controlled by the staging and loadout areas being paved with concrete or coated with nonporous material which is easy to clean. The staging and loadout areas must be cleaned of any spillage before the end of the operating day. Any wastewater from the clean-up shall be directed to the waste water treatment system.

(9 VAC 5-50-140, 9 VAC 5-80-1180 D, and Condition 30 of 04/29/2005permit)

3. **(S.O.E.)** Emission Controls - The odor emissions from all the cookers shall be controlled by the venturi scrubber with the additional requirement for the venturi scrubber exhaust air to be routed to one of the boilers or the cross flow packed scrubber that uses water and ClO<sub>2</sub>. The venturi scrubber, and cross flow scrubber shall be provided with adequate access for inspection and shall be in operation when any cooker is operating.

(9 VAC 5-50-140, 9 VAC 5-80-1180 D, and Condition 31 of 04/29/2005 permit)

4. **(S.O.E.)** Emission Controls - The odor emissions from the various process equipment in the building shall be controlled by the building air being collected and routed to the cross flow packed scrubber that uses water and ClO<sub>2</sub>. The cross flow scrubber shall be provided with adequate access for inspection and shall be in operation when any rendering process is operating.

(9 VAC 5-50-140, 9 VAC 5-80-1180 D, and Condition 32 of 04/29/2005 permit)

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#### B. Monitoring

1. **(S.O.E.) Monitoring Devices** - The venturi scrubber shall be equipped with a device to continuously measure its exhaust air temperature. The monitoring device shall be installed, maintained, and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. The monitoring device shall be provided with adequate access for inspection and shall be in operation when the venturi exhaust air is routed to the cross flow scrubber.

(9 VAC 5-50-140, 9 VAC 5-80-1180 D, and Condition 33 of 04/29/2005 permit)

2. **(S.O.E.) Monitoring Devices** - The cross flow scrubber shall be equipped with devices to continuously measure the water flow rate and CLO2 flow rate (Oxidation Reduction Potential (ORP)). Each monitoring device shall be installed, maintained, and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the cross flow scrubber is operating.

(9 VAC 5-50-140, 9 VAC 5-80-1180 D, and Condition 34 of 04/29/2005 permit)

3. **(S.O.E.) Monitoring Device Observations** - The venturi scrubber exhaust temperature monitor used to continuously measure the exhaust temperature and the cross flow scrubber monitoring devices used to continuously measure the water flow rate and the CLO2 rate (ORP) shall be observed by the permittee with a frequency of not less than once per operating day to ensure good performance of the cross flow scrubber. The permittee shall keep a log of the monitoring device observations. (9 VAC 5-50-140, 9 VAC 5-80-1180 D, and Condition 35 of 04/29/2005 permit)

#### C. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Tidewater Regional Office. These records shall include, but are not limited to:

- 1. **(S.O.E.) Odor Complaints** The permittee shall keep a log of odor complaints received and action(s) taken. This log shall be available for inspection by any State or County Official.
  - (9 VAC 5-50-140, 9 VAC 5-80-1180 D, and Condition 36 of 04/29/2005 permit)
- 2. **(S.O.E.) Monitoring Devices Observations -** The permittee shall keep a monitoring device observation log with date, time, and parameter value. This log shall be available for inspection by any State or County Official.
  - (9 VAC 5-50-140, 9 VAC 5-80-1180 D, and Condition 37 of 04/29/2005 permit)

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## **D.** Reporting

**(S.O.E.)** - The permittee shall notify the Manager, Air Compliance Section in the Tidewater Regional Office by the close of business on the next full business day following the receipt of any odor complaint. In addition, within 14 days of the receipt of each odor complaint, the permittee shall provide the Manager, Air Compliance Section in the Tidewater Regional Office a copy of each individual odor response form explaining the results of the odor investigation and corrective actions taken.

(9 VAC 5-50-140, 9 VAC 5-80-1180 D, and Condition 38 of 04/29/2005 permit)